

and [The array of claim 1,] wherein the array is prepared by a method which comprises steps of:

providing a support having reactive functionalities;

subjecting said support to a first set of reagents or [reactions] reaction conditions, wherein each of said first reagents or reaction conditions cycles with a first specific spatial period along the support, and wherein each individual first reagent or reaction condition in the set is identified as a function of a unique distance or time[;], so that a first set of compounds is produced simultaneously on the array, each compound within first set being related to all other compounds in the first set as a product of the first set of reagents or reaction conditions, and being separated from other first set compounds by the first specific spatial period; and

subjecting said support to one or more additional set of reagents or reaction conditions, wherein each of said additional reagents or reaction conditions cycles with a second specific spatial period along the support, and wherein each individual reagent or reaction [condition] conditions in said one or more additional sets is identified as a second function of unique distance or time, so that at least one additional set of compounds is produced simultaneously on the array, each compound within the additional set being related to all other compounds in the additional set as a product of the additional set of reagents or reaction conditions, and being separated from other additional set compounds by the second specific spatial period, until a desired array of compounds is obtained.

3. (Amended) An array of at least two different chemical compounds attached to a support, wherein the array has linear organization;

wherein the array is [The array of claim 1,] prepared by a method which comprises the steps of:

- a) providing a support having reactive functional groups,
- b) winding the support around a geometric template,
- c) dividing the surface of the template lengthwise into regions,
- d) subjecting each region to one or more reagents or reaction conditions so as to attach reactive moieties or to modify the functional groups, and thereby to simultaneously create a set of compounds on the support in which each compound in a set is related to all other compounds

in the set as a product of the reagents or reaction conditions that the region was subjected to; and  
e) repeating steps (b) through (d) until the desired library is obtained.

Please cancel claims ~~8-36~~, without prejudice.

### Remarks

Claims 1-46 are pending in the application, and claims 8-36 have been withdrawn from further consideration by the examiner, 37 CFR §1.142(b), as being drawn to non-elected inventions. Claims 1-7 and 37-46 stand rejected. Non-elected claims 8-36 have been canceled. Claims 1-3 have been amended. No new matter is added to the specification by these changes. Applicant respectfully requests reexamination and reconsideration of the case, as amended. Each of the rejections levied in the Office Action is addressed individually below.

**I. Rejection under 35 U.S.C. §102(b), as being anticipated by EP 0 385 443.** Claims 1-7 and 37-38 stand rejected under 35 U.S.C. §102(b) as being anticipated by EP 0 385 443 by Lebl *et al.* Examiner takes the position that Lebl *et al.* describe at least two different chemical compounds attached to a linear support. However, the only way to have at least two different chemical compounds attached to the support in the system of Lebl *et al.* is if one stops the synthesis in the middle. In such a circumstance, all products on the support are necessarily related as intermediates on route to the synthesis of a single product. Lebl *et al.*, of course, acknowledges that they teach only a method of "obtaining some or all intermediates and eventually also the desired final product" (page 3, line 54). Thus, Lebl *et al.* do *not* teach a method of forming an array of at least two different chemical compounds wherein the chemical compounds are not intermediates leading to a single final product, as recited in amended claim 1. Support for this amendment to claim 1 can be found in Figure 2 as well as on page 11, lines 12-21, of the Specification as originally filed. Furthermore, one of skill in this art reading the present application would immediately appreciate that it is directed to arrays of diverse chemical